

**PATENT**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In the **PATENT** of:

Pan et al.

**Patent No.:** 7,408,978

**Issued:** August 5, 2008

**Appln. No.:** 10/657,435

**Filed:** September 8, 2003

**Confirmation No.:** 1446

For: EXTENDED ALGORITHM DATA  
ESTIMATOR

Our File: I-2-0394.1US

Date: September 2, 2009

**REQUEST FOR CERTIFICATE OF CORRECTION**

Certificate of Corrections Branch  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

A Certificate of Correction under 35 U.S.C. §§ 254, 255 and 37 C.F.R. §§1.322, 1.323 is requested for U.S. Patent No. 7,408,978. Correction of the following errors is requested.

**ON THE FACE PAGE**

At section (56), OTHER PUBLICATIONS, page 1, right column, line 8, after the words "MD: The", delete "John" and insert therefor --Johns--.

**IN THE SPECIFICATION**

At column 2, line 11, before the word "wherein", delete "drawing" and insert therefor --drawings--.

At column 2, line 44, after "signal,  $\underline{r}$ , is", insert --a--.

At column 5, line 30, before the words "both of", delete " $R_{CIR}$  and  $\underline{H}_{CIR}$ " and insert therefor -- $R_{Cir}$  and  $\underline{H}_{Cir}$ --.

At column 5, line 32, after " $\underline{H}_{Cir}^H$  and", delete " $\underline{H}_s \underline{S}_E + \underline{n}_E$ " and insert therefor -- $\underline{H}_s \underline{S}_E + \underline{n}_E$  --.

At column 5, line 41, before the words "is an error", delete " $\underline{H}_s = \underline{H}_{Cir} - \underline{H}_\Delta$  ( $\underline{H}_\Delta$ " and insert therefor -- $\underline{H}_s = \underline{H}_{Cir} - \underline{H}_\Delta$  ( $\underline{H}_\Delta$  --.

At column 5, line 51, after the word "matrix", delete " $\underline{H}_\Delta$ " and insert therefor -- $\underline{H}_\Delta$  --.

At column 6, line 32, before "and  $\underline{H}_\Delta$ " delete " $\underline{H}_{Cir}^H$ ", and insert therefor -- $\underline{H}_{Cir}^H$ --.

At column 6, line 53, after the words "all elements of", delete " $\underline{y} = \underline{H}_{Cir}^H \underline{H}_\Delta \underline{S}_E = \underline{X}_{SE}$ ", and insert therefor -- $\underline{y} = \underline{H}_{Cir}^H \underline{H}_\Delta \underline{S}_E = \underline{X}_{SE}$ --.

At column 7, line 36, before the words "for  $m=1,2, \dots, M$ ." delete " $h_{W-,m}$ " and insert therefor -- $h_{W-1,m}$ --.

At column 7, line 54, delete Equation 18, and insert therefor -- $L_m = \max \{L\} + \max \{W\} + \varepsilon$ --.

**Patentee:** Pan et al.  
**Patent No.:** 7,408,978

At column 7, line 56, before the words "is a", delete " $\in$ " and insert therefor  $--\varepsilon--$ .

At column 7, line 59, before the words "is chosen", delete " $\in$ " and insert therefor  $--\varepsilon--$ .

At column 9, line 20, after the word "vector", delete " $\tilde{\mathbf{g}}$ " and insert therefor  $--\hat{\mathbf{g}}--$ .

At column 12, line 65, after the word "responses", delete " $\underline{h}_1 \dots \underline{h}_m$ " and insert therefor  $--\underline{h}_1 \dots \underline{h}_m--$ .

**Patentee:** Pan et al.  
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### **REMARKS**

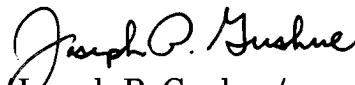
Patentees believe that the above errors are of such a nature as to justify the issuance of a Certificate of Correction. Patentees have enclosed a completed Certificate of Correction Form PTO/SB/44.

Since at least one of the errors was caused by Applicants, please charge the surcharge fee pursuant to C.F.R. §1.20(a) of \$100.00 to the Deposit Account of InterDigital Communications Corporation, Deposit Account No. 09-0435.

Patentees respectfully request that the Certificate of Correction be issued.

Respectfully submitted,

Pan et al.

  
By Joseph P. Gushue/  
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# UNITED STATES PATENT AND TRADEMARK OFFICE

## CERTIFICATE OF CORRECTION

Page 1 of 2

PATENT NO. : 7,408,978

APPLICATION NO.: 10/657,435

ISSUE DATE : August 5, 2008

INVENTOR(S) : Pan et al.

It is certified that an error appears or errors appear in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

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At column 5, line 32, after " $H_{Cir}^H$  and", delete " $H_s S_E + n_E$ " and insert therefor -- $H_s S_E + n_E$ --.

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At column 5, line 51, after the word "matrix", delete " $H_{\Delta}$ " and insert therefor -- $H_{\Delta}$ --.

### MAILING ADDRESS OF SENDER (Please do not use customer number below):

Volpe and Koenig, P.C.  
United Plaza, Suite 1600  
30 South 17th Street  
Philadelphia, PA 19103

This collection of information is required by 37 CFR 1.322, 1.323, and 1.324. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1.0 hour to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Attention Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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At column 6, line 53, after the words "all elements of", delete " $y = H_{Cir}^H H_{\Delta} S_E = X_{SE}$ ", and insert therefor  $--y = H_{Cir}^H H_{\Delta} S_E = X_{SE}--$ .

At column 7, line 36, before the words "for  $m=1,2, \dots, M$ ." delete " $h_{W-,m}$ " and insert therefor  $--h_{W-1,m}--$ .

At column 7, line 54, delete Equation 18, and insert therefor  $--L_m = \max \{L\} + \max \{W\} + \epsilon--$ .

At column 7, line 56, before the words "is a", delete " $\epsilon$ " and insert therefor  $--\epsilon--$ .

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